## **REMARKS**

## **Introductory Comments:**

Claims 1-19 are pending in the application. Claims 20-37 were withdrawn from consideration in a phone conversation with the Examiner on February 20, 2004. Claims 8 and 14 are cancelled.

Claims 1-5, 9-13, 16-17 and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,487,331 to Hung. Claims 6-8, 14-15 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The Applicants respectfully request reconsideration of claims 1-7, 9-13, and 15-19. Claims 8 and 14 are cancelled, whereby limitations thereof are incorporated in claims 1 and 11 respectively.

On page two, paragraph one of the Office Action, restriction to one of the two provided inventions is required under 35 U.S.C. §121. Applicants affirm the election, made during the phone conversation with the Examiner on February 20, 2004, of Group I, Claims 1-19, drawn to a method for processing an optical communications signal, classified in class 385, subclass 31.

## **In Response To The Claim Objections:**

Claims 6-8, 14-15 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claim 8 is cancelled and the limitations of claim 8 are incorporated in claim 1. Claim 14 is cancelled and the limitations of claim 14 are incorporated in claim 11. Applicants therefore submit

that claims 6-7, 15-16 and 18 depend from the amended claims 1 and 11 respectively and are believed to be allowable for at least this reason.

## **In Response To The Claim Rejections:**

Claims 1-5, 9-13, 16-17 and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,487,331 to Hung.

According to the Office Action, Hung describes a method for processing an optical communications signal comprising coupling at least one first-optical signal (Input) into a primary first-optical circulator (830) input of a first-optical circulator (832), splicing a primary-first-optical-circulator output port (834) to a first 50:50 coupler input port (804) of a 50:50 coupler (801), employing a secondary first-optical circulator output port (836) of said first optical circulator as a first-optical fiber output port of said 50:50 coupler, splicing a primary second-optical circulator (820) output port (824)to a second 50:50 coupler input port (802) of said 50:50 coupler.

The Office Action also alleges Hung includes employing a secondary second optical circulator output port (826) as a second-optical fiber output port; splicing a first 50:50 coupler output port (803) to a first optical fiber, having a first optical fiber length, which is terminated with a first reflector (805) that returns any optical signals back toward said 50:50 coupler, splicing a second 50:50 coupler output port to a second optical fiber(807), having a second length (see 810), which is terminated with a second reflector (809) that returns any optical signals back toward said 50:50 coupler, said first and second reflectors having substantially the same reflection properties, interfering reflected signals from said first and second reflectors as they

pass back through said 50:50 coupler, allowing interference products of said reflected signals to propagate back toward said first and second optical circulators, which direct said interference products to said first and second optical fiber output ports (see Col 8 Lns 12-24, and controlling and first and second fiber lengths and the properties of said reflectors so as to accomplish the desired optical processing in a manner that is resistant to varying environmental influences (see Figures 7-9 and Cols 7-8).

The Office Action still further alleges that Hung describes coupling at least one second optical signal (Add) into a primary second-optical circulator input of said second optical circulator, wherein said first and second optical circulators have substantially the same propagation characteristics. Hung further describes, according to the Office Action, the reflectors as Faraday rotator-mirrors (see Figure 14 and Cols 10-11). Hung further describes, also according to the Office Action, the system used as a multiplexer/demultiplexer or an optical switch (see Figure 9 and Col 8 Lns 25-44).

Although Applicants believe the claims to be allowable in their present form and that the Hung reference discloses a conventional system, Applicants nevertheless amend the claims to clarify the original intent thereof. Applicants have amended claim 1 to include "the method utilized as a DPSK demodulator" in accordance with the cancelled claim 8. Applicants have also amended claim 11 to include "comprising a heating element" in accordance with the cancelled claim 14. The Applicants respectfully submit that the amended claims 1 and 11 are novel and non-obvious because the claims and the prior art differ as mentioned in the Office Action dated

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March 5, 2004. The Office Action recognized that claims 6-7 and 14-15 describe using a heating element to tune the fiber lengths and claims 8 and 18 describe the system used as a DPSK demodulator, and that this is subject matter not described by the prior art of record.

Claims 2-7 and 9-10 depend from the amended claim 1, and claims 12-13 and 15-19 depend from the amended claim 11. These claims are believed to be allowable for at least the reasons set for the above.

In view of the aforementioned remarks, it is respectfully submitted that all pending claims are in a condition for allowance. A notice of allowability is therefore respectfully solicited. Please charge any fees required in the filing of this amendment to Deposit Account 50-0476.

The Examiner is invited to contact the undersigned at (248) 223-9500 if any unresolved matters remain.

Respectfully Submitted,

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